WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SUPPLEMENTARY SHEET)



International reference PCT/EP2004/051870

Re: Item V

IAP20 Res'd FSTATO 27 FEB 2006

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statements

- 1. Reference is made to the following documents:
 - D1: WO 03/055149 A (HAYASHI MASATO ; HITACHI LTD (JP); KATO HIROMITSU (JP)) July 3, 2003 (2003-07-03)
 - D2: TSENG Y-C ET AL: "LOCATION AWARENESS IN AD HOC WIRELESS MOBILE NETWORKS" COMPUTER, IEEE COMPUTER SOCIETY, LONG BEACH., CA, US, US, Vol. 34, No. 6, June 2001 (2001-06), pages 46-52, XP001103949 ISSN: 0018-9162
 - D3: FABIAN GARCIA NOCETTI, JULIO SOLANO GONZALEZ, IVAN STOJMENOVIC: "Connectivity Based k-hop Clustering in Wireless Networks" TELECOMMUNICATIONS SYSTEMS, [Online] May 2003 (2003-05), pages 1-16, XP002311117 NETHERLANDS Found on Internet: URL:http://www.site.uottawa.ca/-ivan/GSS-T S.pdf> [found on 2004-12-15]
- 2. **Claim 1** of the present application does not fulfill the requirements of Article 33(1) PCT, as the subject matter of the claim is not inventive within the sense of Article 33(3) PCT.

Document D1 discloses, according to the most important features of claim 1, a method for clustering (page 2, paragraph 4) a plurality of users (page 2, paragraph 4) in a mobile network (page 2, paragraphs 2, 4), wherein a specific profile (page 2, paragraph 4) is assigned to each user which contains data about the user and at least one constraint (page 2, paragraph 4, 7; page 5, paragraph 4), direct data exchange (page 15, paragraph 1) taking place between at least two users in order to find users with profiles of a specified content (page 26, paragraph 2), taking the constraint (page 9, paragraph 5 - page 10, paragraph 1) into account.

The subject matter of claim 1 differs from the disclosure in document D1 in that data exchange takes place between two users when they are in a specified communication zone.

The technical problem which the application attempts to solve consists in discovering users with particular profiles in a particular reception area.

On consulting the prior art, the average person skilled in the art who is familiar with this problem would come upon document D2 which likewise deals with services for users in a mobile network. In particular so-called "location-aware services" (page 49, right-hand column to page 50, left hand column) such as the "who-is-around service" and "neighbor-and-service discovery" are disclosed which determine who is present in a particular communication zone and which services/profiles the user has as characteristics.

On the basis of the method in document D1 and with knowledge of the disclosure by document D2, it would therefore be obvious to the average person skilled in the art to transfer the teaching from D2 to the method in D1 in order to improve it, and therefore to arrive at a method according to the subject matter of claim 1.

Claim 1 is not therefore considered to be inventive within the meaning of Article 33(1), (3) PCT.

- 3. Referring to the objections to claim 1, nor is the device claim 18 inventive within the meaning of Article 33 (1), (3) PCT, as it corresponds to claim 1.
- 4. The **dependent claims 2 -17 and 19 25** contain no features which, in combination with the features of any claim to which they relate, satisfy the requirements of PCT (Art. 33 (1) PCT) in respect of inventive step (Art. 33 (3) PCT), as the features are either directly obtainable from publications D1 or D2 or are obvious in combination with the teaching from the other publications cited in the search report or general technical knowledge.

Re: Item VII

Certain defects in the international application

- 1. In terms of technical features, the claims have not been drafted in two-part form in accordance with Rule 6.3 (a) PCT by summarizing the features known from the prior art (see document D1) in the pre-characterizing part (Rule 6.3 (b) (i) PCT) and listing the other features in the characterizing part (Rule 6.3 (b) (ii) PCT).
- 2. The requirements of Rule 5.1 (a) (ii) PCT are not satisfied, as the prior art (see documents D2 and D3) is not mentioned and outlined in the introductory part of the description.

Re: Item VIII:

Certain observations on the international application

The wording of a claim must admit no doubt as to the category to which the claim belongs. In order to fulfill the requirements of Art. 6 PCT in respect of clarity, the device claim 18 must be defined without exception by its own structural features and not by functional features.

This also applies analogously to the independent claims 20, 23 and 24.

2. In claims 23 - 25 the scope of protection is not clearly defined, as it is unclear whether protection is sought for a device with a computer program or computer-readable data media or machine-readable media or whether protection is sought for a computer program or computer-readable media or machine-readable data media alone (Art. 6 PCT). Dependent claims of a device claim must describe further details of the device to which they relate. Specifications of other devices or systems are not permissible.